What is claimed is:

1. A mutually-assisted proximity informer system with a plurality of wireless devices having a same modulation, format and coding algorithm over a same frequency channel, said system comprising:

a message source among of said a plurality of wireless devices for delivering a message;

an original message unit in a frame format and embedded with an ID, a message/status and a relay sequence for a relay process of said message generated and transmitted by said message source;

at least a relaying device among of said a plurality of wireless devices for said relay process, wherein said original message unit is received and transmitted voluntarily one by one with a message unit in said frame format by said at least a relaying device until a termination of said relay process, and said relay sequence count is constantly incremented during the relay process; and

a destination out of said a plurality of wireless devices for receiving the message.

2. A system according to claim 1, wherein said original message unit comprises a first relay location marker, and if said message source is a mobile one, then said relay sequence is implanted with a '0' and said first relay location marker is left empty; otherwise said relay sequence is implanted with a '1' and said first relay location marker is implanted with location of said message source.

3. A system according to claim 1, wherein said frame format comprises a field of first relay location marker, and any one of said at least one relaying device which receives said message unit carrying relay sequence count of 0 implants its location into said first relay location marker frame of said message unit which it receives, then

retransmits said modified message unit.

4. A system according to claim 1, wherein said termination is executed when said relay sequence reaches a threshold.

5. A system according to claim 1, wherein said termination is executed when said ID of said original message unit is a known one to said at least a relaying device which receives said message.

6. A system according to claim 1, wherein said termination is executed when said ID of said message unit is said one that has been transmitted by the same relaying device previously within a certain period of time.

7. A system according to claim 1, wherein said at least a relaying device waits for a time period before retransmission so that another message unit that includes retransmit canceling frame can be announced.

8. A system according to claim 1, wherein said at least a relaying device is inserted with a randomly chosen interval for retransmitting the message unit to reduce collisions caused by the simultaneous transmission among said relaying devices.

9. A system according to claim 1, wherein said message is encrypted in said original message unit so that only said destination device can decrypt its original content.

10. A system according to claim 9, wherein said message is encrypted with a session key.

11. A system according to claim 10, wherein a session key is assigned each time for each relay session.

12. A system according to claim 10, wherein said session key decrypted by said destination device is implanted in a frame of said original message unit and said modified message unit is broadcasted by said destination device so that said session key is made available to other mutually assisting devices.

13. A system according to claim 10, wherein a two-way communication link between said message source and said destination is established by a forward and reverse relay process.

14. A system according to claim 13, wherein said reverse relay is carried out by each member device of said communication path when public annotation is decryptable with the aid of said session key.

15. A system according to claim 13, wherein said frame format comprises a field of tunnel established commanding whether said communication tunnel is to be established.

16. A system according to claim 13, wherein commanding tunnel established value to be 1 eliminates member devices not situated along both said forward and reverse relay pathes from unnecessary relaying and avoid excessive spectrum usage.

17. A system according to claim 9, wherein said message is encrypted with a private key shared between said message source and said destination.

18. A system according to claim 1, further comprising an echo message unit delivered from said destination to said message source for notifying arrival of said message.

19. A system according to claim 1, wherein said frame format comprises a field of retransmit canceling for notification of said termination.

20. A method for a mutually-assisted proximity informer system with a plurality of wireless devices having a same modulation, format and coding algorithm over a same frequency channel, said method comprising the steps of:

generating and transmitting an original message unit in a frame format and embedded with an ID, a message/status and a relay sequence for delivering a message to a destination by a message source among of said a plurality of wireless devices;

performing a relay process of receiving and transmitting voluntarily one by one with a message unit in said frame format generated by at least a relaying device among of said a plurality of wireless devices for said message, wherein said relay sequence is constantly incremented during said relay process; and

terminating said relay process.

21. A method according to claim 20, further comprising a step of implanting into said original message unit with a first relay location marker, wherein if said message source is a mobile one, then said relay sequence is implanted with a '0' and said first relay location marker is left empty; otherwise said relay sequence is implanted with a '1' and said first relay location marker is implanted with location of said message source.

22. A method according to claim 20, further comprising a step of implanting a first relay location marker by said at least a relaying device with its location when said relay sequence is 0 if it has a different ID from that of said original message unit.

23. A method according to claim 20, further comprising a step of determining if said relay sequence reaches a threshold for terminating said relay process.

24. A method according to claim 20, further comprising a step of determining if said ID of said original message unit is a known one to said at least a relaying device for terminating said relay process.

25. A method according to claim 20, further comprising a step of determining if said ID of said original message unit is the one that has been transmitted by the same relaying device previously within a certain period of time for terminating said relay process.

26. A method according to claim 20, further comprising a step of encrypting said message in said original message unit so that only said destination device can decrypt its original contant.

27. A method according to claim 26, wherein a session key is encrypted in said message/status.

28. A method according to claim 27, wherein a session key is assigned each time for each relay session.

29. A method according to claim 27, further comprising the steps of:

generating and delivering an echo message unit from said destination to said message source; and

decoding a public annotation from said echo message unit with said session key.

30. A method according to claim 29, further comprising a step of implanting with a '1' into a tunnel established field of said echo message unit for establishing a communication tunnel between said message source and said destination, wherein said communication tunnel links said message source and said destination through said at least a relaying device in said relay process for said original message unit.

31. A method according to claim 30, wherein any one of said relaying devices not linked with said communication tunnel will not join with other relay process for said communication tunnel when said tunnel established is embedded with a '1'.

32. A method according to claim 31, further comprising a step of resetting said tunnel establishing to be 0 to reestablish a link once said communication tunnel is broken.

33. A method according to claim 26, wherein a private key is shared only between said message source and said destination.

34. A method according to claim 20, further comprising a step of inserting a time period for said at least a relaying device so that before the time period elapses a message unit including said retransmit canceling signal can be announced.

35. A method according to claim 20, further comprising a step of generating a randomly chosen interval for said at least a relaying device to transmit said message unit.

36. A method according to claim 20, further comprising a step of implanting with a mark into a retransmit canceling field of said message unit for immediately terminating said relay process.

37. A method according to claim 20, further comprising a step of registering a new wireless device for joining into said mutually-assisted proximity informer system.

38. A method according to claim 20, further comprising the steps of:

encrypting a public annotation with a session key; and

encrypting a private message and said session key with a private key;

wherein said public annotation can be decoded by said mutually-assisted devices only after said session key is decoded by said destination.

39. A method according to claim 20, further comprising a step of comparing said messages previously received and transmitted with a message unit carrying a retransmit canceling by a mutually-assisted device to determine if it is on a forward and reverse relay path.

40. A method according to claim 20, further comprising a step of implanting with a mark into a retransmit canceling field of said message unit so that said mutually-assisted devices which keep track of previous forward relay records and receive a reverse relay message can identify whether they are at a position of both forward and reverse relaying path.

41. A system for accessing public messages with a plurality of wireless devices having a same modulation, format and coding algorithm over a same frequency channel, said system comprising:

a message source of said a plurality of wireless devices for

delivering said public messages; and

an original message unit embedded with an ID and a message/status for transmitting said public message.

42. A system according to claim 41, wherein said access of public messages is either actively requested by a member device or is freely available to all member devices without request.

43. A system according to claim 42, wherein said original message unit comprises a relay sequence constantly incremented during a relay process.

44. A system according to claim 43, further comprising at least a relaying device among of said a plurality of wireless devices for said relay process, wherein said original message unit is received and transmitted voluntarily one by one by said relaying devices until a termination of said relay process.

45. A system according to claim 44, wherein said termination is executed when said relay sequence reaches a threshold.

46. A system according to claim 41, further comprising a query message unit transmitted to said message source for requesting for said public messages.

47. A system according to claim 46, wherein said query message unit comprises a request for positioning.

48. A method for accessing public messages with a plurality of wireless devices having a same modulation, format and coding algorithm over a same frequency channel, said method comprising the step of:

generating and transmitting an original message unit embedded with an ID and a message/status for transmitting said public messages by a message source among of said a plurality of wireless devices.

49. A method according to claim 48, further comprising the steps

of:

performing a relay process of receiving and transmitting voluntarily one by one with a message unit by at least a relaying device among of said a plurality of wireless devices for said public messages, wherein a relay sequence in said message unit is constantly incremented during said relay process; and

terminating said relay process.

50. A method according to claim 49, further comprising a step of determining if said relay sequence reaches a threshold for terminating said relay process.

51. A method according to claim 48, further comprising a step of generating and transmitting a query message unit to said message source for requesting for said public messages.

52. A method according to claim 48, further comprising a step of generating and transmitting a query message unit to said message source for requesting for positioning.

53. A method according to claim 48, wherein said message source periodically generates and transmits an original message unit.